Science Toolkit: Grade 5 Objective 1.C.1.d

Student Handout: Science: Grade 5 Objective 1.C.1.d

Standard 1.0 Skills and Processes

Topic C. Communicating Scientific Information

Indicator 1. Recognize that clear communication is an essential part of doing science because it enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.

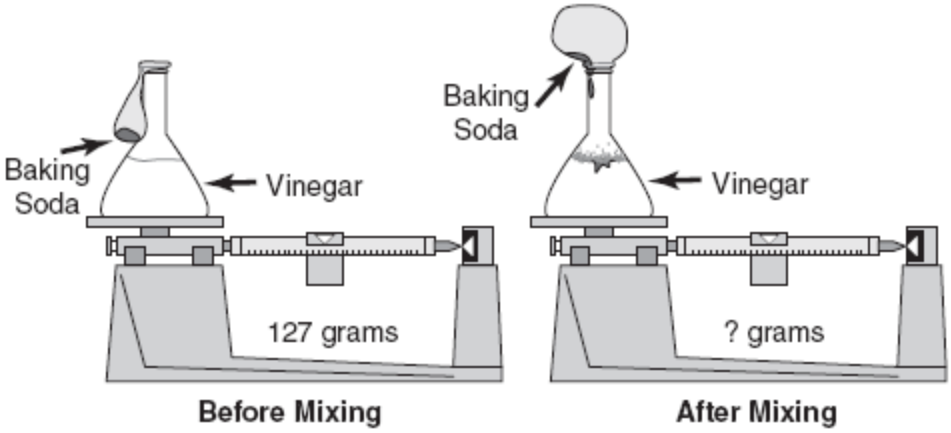
Objective d. Construct and share reasonable explanations for questions asked.

Selected Response (SR) Item

Question

Use the information below to answer the following.

Students investigated the reaction that occurs when mixing baking soda and vinegar. The procedure for the investigation is shown below.The students recorded their observations in the data tables below the diagram.



Material	Mass (grams)
Baking soda	24
Balloon	3
Vinegar	20
Flask	80

Before Mixing	After Mixing
• Balloon is limp. • Vinegar is clear. • Baking soda is a white, powdery solid. • Flask feels cool.	• Liquid is cloudy at first. • Bubbles in the liquid. • Balloon inflates. • Flask stays cool. • Liquid becomes clear over time.

The students conducted the same investigation, but doubled the amount of baking soda and the amount of vinegar used.

What change in the results did the students most likely observe?

A. The flask became warm.
B. The balloon inflated more.
C. The vinegar remained cloudy.
D. The baking soda did not dissolve.

Correct Answer

B. The balloon inflated more.

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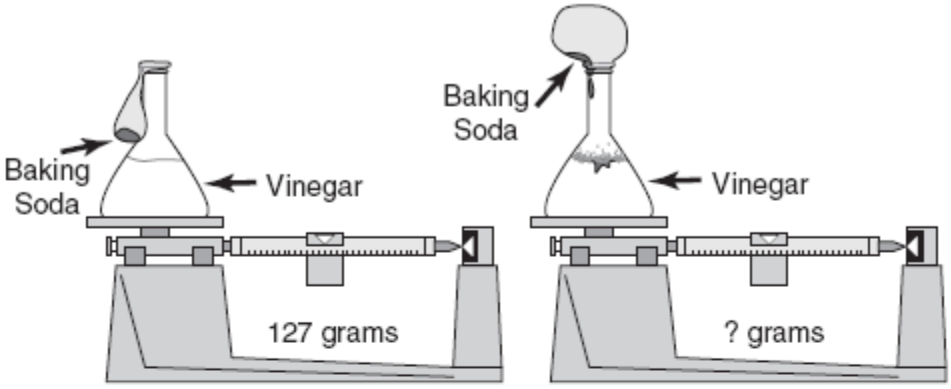

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